

REMARKS

Claims 1-12 are all the claims pending in the application.

The Examiner indicates that claims 7, 8, 11 and 12 are allowed. However, the Examiner rejects claims 1-3, 6, 9 and 10 under 35 U.S.C. § 102(b) as being anticipated by a newly-cited Nakamura et al. (Nakamura), and claims 4 and 5 under 35 U.S.C. § 103(a) as being unpatentable over Nakamura.

Applicant respectfully traverses the Examiner's prior art rejections as follows.

The explained in Applicant's previous Amendment filed May 12, 2003, the embodiments of Applicant's invention as claimed in independent claims 1, 2 and 9 define unique combination of features comprising, *inter alia*, control means for performing a correcting process for the vibration signal based on the motor rotational number. In this regard, Applicant's independent claims 1, 2 and 9 require a band pass filter means (claims 1, 2 and 9 have been amended explicitly to recite this feature). Since this feature was also believed to have been implicit in the original claims 1, 2 and 9, these amendments do not narrow the scope of the original claims 1, 2 and 9, but are merely for clarification purposes. No estoppel is created. Furthermore, no additional search should be needed, and therefore, entry and consideration of this amendment is respectfully requested.

According to the foregoing features, the band pass filter (51), implemented as shown, for example, in Applicant's Fig. 4, takes off a normal condition component (e.g. directive current component) of the motor rotational number and a detecting noise (e.g. high frequency noise).

(See non-limiting implementation described in paragraph [63] at page 13 of Applicant's specification.)

The newly-cited Nakamura reference discloses a mechanical-vibration apparatus including a motor drive device 106, a motor containing mechanism system (101), a mechanical vibration detecting apparatus (102), phase adjuster (107) and an amplitude adjuster (108) (see Nakamura, Fig. 3).

In contradistinction to the embodiments of Applicant's invention as defined in independent claims 1, 2 and 9, in Nakamura, the mechanical vibration signal is generated by the torque command and the motor angular velocity passed through the high-pass filter (105) in the mechanical vibration detecting apparatus (102), thereby the mechanical vibration signal is passing through the high pass filter (105) with a high frequency noise (see Nakamura, Fig. 3). Further, in Nakamura, the performance of the apparatus is decreased by the effect of model error since the equivalent rigid body model (103) is used in the mechanical vibration detecting apparatus (102), in this regard, the micro-computer has to process a more complicated calculation.

Therefore, Applicant's independent claims 1, 2 and 9, as well as the dependent claims 3, 6 and 10 (which incorporate all the novel and unobvious features of their respective claims), are not anticipated by (i.e., are not readable on), and dependent claims 4 and 5 would not have been obvious from Nakamura, at least for these reasons.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

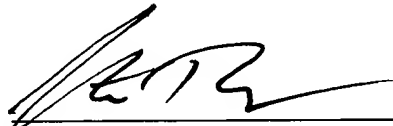
Amendment Under 37 C.F.R. § 1.116
U.S. Appln No. 09/961,283

Atty Dkt No. Q66363

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Stan Torgovitsky
Registration No. 43,958

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: September 18, 2003